Application No.: 09/677,752

Amendment Dated: February 17, 2006 Reply to Office Action of: August 30, 2005 Attorney Docket No.: 71515. 087.999 Customer No.: 35161

REMARKS

This Amendment is in response to the Office Action mailed on August 30, 2005, for the present application, which has been reviewed. Considered together with the following remarks, the arguments below and request for reconsideration are believed sufficient to place the application into condition for allowance. No new matter has been added to the application. Applicants express appreciation for the thoughtful examination by the Examiner.

Support for the amendments can be found in the specification as follows:

Amendment to claim 108:

page 18, Table 1.

Amendment to claim 130:

page 21, lines 20-34.

The present invention is drawn to PMP polypeptides of *Chlamydia*, further defined by amino acid and nucleotide sequences thereof, used in vaccine formulations comprising an effective amount of said polypeptide.

Application No.: 09/677,752

Amendment Dated: February 17, 2006 Reply to Office Action of: August 30, 2005 Attorney Docket No.: 71515. 087,999

Customer No.: 35161

CONCLUSION

In light of the foregoing, Applicants respectfully submit they have addressed each and every item presented by the Examiner in this Office Action. Favorable reconsideration of all of the claims as amended is earnestly solicited. Applicants submit that the present application, with the foregoing claim and specification amendments and accompanying remarks, is in a condition for allowance and respectfully request such allowance.

In the event any further matters requiring attention are noted by Examiner or in the event that prosecution of this application can otherwise be advanced thereby, a telephone call to Applicants' undersigned representative at the number shown below is invited.

Respectfully submitted.

Registration No. 46,487

DICKINSON WRIGHT PLLC 1901 L Street NW. Suite 800 Washington D.C. 20036

Telephone: (202) 659-6950

Facsimile: (202) 659-1559

Date: February 17, 2006

DC 71515-87 108702v2 2/17/2008

husday, September 6, 2001

Blast Result



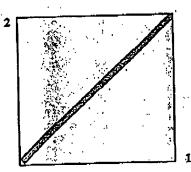
Blast 2 Sequences results

BLAST 2 SEQUENCES RESULTS VERSION BLASTP 2.2.1 [Aug-1-2001]

gap open: 11 gap extension: 1 Matrix BLOSUM62 dropoff; 50 expect; 10.0 wordsize: 3 Filter Align

Sequence 1 kilkeq_1 Length 956 (1 .. 956)

Sequence 2 kellseq_2 Length 965 (1..965)



source and expect value) is calculated based on the size of an database

Score = 1885 bits (4884), Expect = 0.0 Identities = 925/934 (99%), Positives = 930/934 (99%)

VPDP7RESLSHKISLTGDTHNLTNCYLDNLRYILAILQKTPNBGAAVTITDYLSFPDTQK 82 Query: 23

vpdp;reslsnkislagothniancylonlry ilailoktpnegaavt itdylsppdtok VPDPTXESLSNKISLTGDTHNLTNCYLDNLRYILAILQKTPNEGAAVTITDYLSFFDTQK 91 Sbjet: 32

egiyfaknlipesogaigyaspnsptveirdtigpvifenntccrpptssnpnaavnkir 142 Query: 83

egiyfaknutpesggaigyaspnsptveirdtigpvifemytccrpftssnpnaavnkir eclyparnltpesocalgyaspnsptveirotigpvipenntccrpftsenpkaavnkir 151 Sbjet: 92

Query: 143 EGGAZHAQNLYINHNHDVVQFMKNFSYVRGGAISTANTFVVSENQSCFLFMDNICIQTNT 202 eggaihagnly inhnhovofmonpsyvrggaistantpyvsengscflfmoniciotnt

Sbjet: 152 EGGAIHAONLYINHNHDVVGFHENPSYVRGGAISTANTFVVSENQSCFLFMENICIOTNT 211

Query: 203 AGROGALYAOTSNSFESNNCDLFFINNACCAGGALFSPICSLYGNRGNIVFYNNRCPKNV 262 agkogatyagtenefeenncdlffinnaccaggatfeficeltonronivfynnrcfknv

Sbjet: 212 AGKGGAIYAGTSNSFESNNCDLFFINNACCAGGAIFSPICSLTGNRGNIVFYNNRCFKNV 271

Query: 263 ETASSEASDGGAIRVTTRLDVTGNRGRIFFSDNITKNYGGAIYAPVVTLVDNGPTYFINN 322

etasseasdogaikvitrlovignrgripfsdnitknyggaiyapvvtlvdrgptypinn Sbjct: 272 etasseasdogaikvttrldvtghrgriffsdnitknyggaiyapvvtlvdngptypinn 331

Quexy: 323 Vanakccaiyidotsnskisadrhaiifnenivtnvtsanotstsanffrknaitvasss 382

+annrogalyidotenskisadrualifnenivtnvt+anotstsanpprrnaitvases Sbjct: 332 Ianneggatyidgtenskisadrhalifnenivtnvtnangtetsanppremaitvases 391

Query: 383 Geilloagssonlifydpievsnagvsvsfnkeadotgsvvfsgatvnsadfhornlotk 442

Geillgagesonlifyddirvsnagvsvefnkeadotgsvvpsgatvnsadfhornlotk bjet: 392 GEILLGAGSSONLIFYDFIEVSNAGVSVSFNKEADQTGSVVFSGATVNSADFHQENLQTK 451

Query: 443 traplitlengflciedhaqlitvnrftqtggvvslgngavlscykngagnsasnasitlkh 502

tpaplylshoflciedhaqlitvnrftqtgdvvslgrqavlscykrgagnsagnasitlikh Sbjet: 452 TPAPLITLENGFLCIBDHAQLITVNRFTQTQQVVSLQNQAVLSCYRRGAQNSASNASITLKH 511

Query: 503 iglilestlesgabiplimveptkinsknytadtaatpsledvklsliddygnspyestdl 562 en.com.vcaldtdi.eurptrnennytadtaatpslsdyklsliddygnspyestdl

PAGE 16/18 * RCVD AT 2/17/2006 2:35:28 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/36 * DNIS:2738300 * CSID:2026591559 * DURATION (mm-ss):04-48

Pece: 2

```
Blast Rosull
day, September 6, 2001
jct: 512 iglnlssilksgæipllwveptnnsnnytædtæætfsledvkleliddygnepyæetdl 571
LETY: 563 THALSSOPMLSISEASDNOLRSDDMDFSGLNVPHYGMQGLNSWGWAKTQDFEPASSATIT 622
         Thalsopmlsiseasonglrsdondfsglnvphygngglm+konaktodpepasaatit
ijct: 572 Thalseqphisiseasdnqlrsddmdpsglnvphygwqqlmtwgwaktqdpepassatit 631
tery: 623 DPKKANRFHRTLLLTWLPAGYVPSPKHRSPLIANTLWGNMLLATESLKNSAELTPSDHPF 682
         DP+XANRPHRTLLLTWLPAGYVPSPKHRSPLIANTLMGNMLLATESLKMSAELTPSDKPF
ijet: 632 DPQKANRFHRTLLLTWLPAGYVPSPKHRSPLIANTLWGMMLLATESLKNSAELTPSDHPP 691
12TY: 683 WGITGGGLGMMVYQEPRENHPOPHMRSSGYPAGMIAGQTHTFSLKPSQTYTKLNERYARN 742
         wgitggglgmwyg+prenhpgfkmrssgy agmiagqthtpslkpsqtytklneryakn
ojet: 692 MgITGGGLGMMVYQDPREMHPGFMMRSSGYSAGMIAGQTHTFSLKFSQTYTKINERYAXN 751
101Y: 743 NVSKNYSCQGEMLFSLQEGFLLAKLVGLYSYGDHNCHHFYTQGEML/ISQGYFRSQTMGG 602
         NVSSKNYSCOGENLFSLQEGFLL KLVGLYSYGDHNCHHFYTQGENLISQOTFRSQTMGG
ojet: 752 NVSSKNYSCQGEMLFSLQEGFLLTKLYGLYSYGDHNCHHFYTQGENLTSQGTFRSQTMGG 811
101y: 803 Avffdlpmkpfgsthiltapflgalgiysslshftevgayprsfstktplinvlypigvk 862
          avfpdlphkpfgstkiltapplgalgiysslshftevgayprspstktplinvlvpigvk
ojct: 812 avffdlpmkpfgsthiltapflgaløjysslshftevgayprsfstktplinvlvpigvk 871
LBIY: 863 GSFMNATQRPQAMTVELAYQPVLYRQELEIATQLLASKGIWFGGGGPSSRHAMSYKISQC 922
          GSFHNATQRPQAWTVELAYQPVLYRQE IATQLLASKGIWFGSGSPSSRHAMSYKISQQ
bjct: 872 OSFMNATQRPQAWTVELAYQPVLYRQEPGIATQLLASKGIWFGSGSPSSRHAMSYKISQQ 931
uexy: 923 TQPLSWLTLHFQYHGFYSSSTFCNYLNGEIALRF 956
          toplswltlhfoyhgfyssstfcnylngblalrf
bjet: 932 TOPLSWLTLHFQYHGFYSSSTFCNYLNGEIALRF 965
                                                             0.38 total secs.
                                    0.02 sys. secs
             0.36 user secs.
PU time: ~
apped
ambda
           0.132
  0.316
                    0.396
apped
ambda
          0.0410
  0.267
Merix: BLOSUM62
pap Penalties: Existence: 11, Extension: 1
lumber of Hits to DB: 12,524
Number of Sequences: 0
number of extensions: 873
tumber of successful extensions: 15
number of sequences better than 10.0: 1
Number of HSP's better than 10.0 without gapping: 1
number of HSP's successfully gapped in prelim test: 0
fumber of HSP's that attempted gapping in prelim test: 0
Comber of HSP's gapped (non-prelim): 1
length of query: 956
length of database: 239,316,239
effective RSP length: 131
effective length of query: 825
affective length of database: 205,523,009
effective search space: 170381482425
affective search space used: 170381482425
r: 9
A: 40
x1: 16 ( 7.3 bits)
K2: 129 (49.7 bits)
X3: 129 (49.7 bits)
81: 41 (21.6 bits)
82: 77 (34.3 bits)
```